

IN THE SPECIFICATION

Please replace paragraph 0004 of the present specification with the following amended paragraph:

[0004] As described in co-pending, commonly assigned U.S. Patent Application Serial No. 09/905,227, published as US/2002/0065512-A1 (the "'512 publication") and granted as U.S. Patent ~~6,635,034~~<sub>6,635,054</sub>, the disclosures of which are hereby incorporated by reference herein, an expandable structure is used as a reflector for directing and focusing ultrasonic waves from an ultrasonic transducer into a region of tissue to be ablated. As further described in the '512 publication, certain preferred embodiments according to that disclosure include an expandable structure incorporating a structural balloon which is inflated with a liquid and a reflector balloon inflated with a gas. The balloons share a common wall. The balloons are configured so that the common wall has a generally parabolic shape. Because the liquid in the structural balloon and the gas in the reflector balloon have substantially different acoustic impedances, the interface between the balloons at the common wall is a nearly perfect reflector for ultrasonic waves. Ultrasonic waves are emitted from a small transducer within the structural balloon and passes radially outwardly from the emitter to the reflector. The reflector redirects the ultrasonic waves and focuses it into a ring-like ablation region encircling the central axis of the emitter and balloons. This ablation region is just forward of the structural balloon. Thus, the ultrasonic waves will ablate tissue in a region encircling the central axis or forward-to-rearward axis of the balloon structure.

Please replace paragraph 0057 of the present specification with the following amended paragraph:

[0057] A tube 28 extends through the structural balloon at the central axis 26. Tube 28 defines a port 29 on or forward of the forward wall 38 of the structural balloon. Tube 28 communicates with a lumen 30 within catheter 12. Lumen 30 extends to the proximal end 14 of the catheter and is provided with a suitable fluid connection such as a Luer hub. The bore of tube 28 and lumen 30 of catheter 16 form a continuous passageway extending from the outlet port 29, just distal to the ablation device back to the proximal end 14 of the catheter. As further described in co-pending, commonly assigned U.S. Patent Application Serial No. 10/244,271, filed September 16, 2002, published as US/2004/0068257-A1 ("the '257 application") the disclosure of which is incorporated by reference herein, tube 28 may be formed from a material such as an expanded polymer of the type commonly used in vascular grafts, so that the interior bore of the tube remains patent when the tube is stretched. As also disclosed in the ~~'271~~ '257 application, a coil spring 34 may be provided within the structural balloon, such that the coil spring surrounds tube 28. A reinforcing structure which may include one or more rigid tubes of metal or a rigid polymer such as polyether ether ketone ("PEEK") 36 desirably surrounds tube 28 and spring 34. As described in greater detail in the ~~'271~~ '257 application, the spring is compressed when the balloons are in the inflated, operative state. When the balloon is deflated, the spring expands and moves the forward wall 38 of the structural balloon in the forward or distal direction F (up and to the left, as seen in FIG. 1) relative to the rearward or proximal end of the balloon and relative to the catheter 12, thereby collapsing the balloon in a radial direction, and also twists the balloons about axis 26 to facilitate radial collapse and formation of a small, radially compact unit for withdrawal from the patient. However, when the balloons are inflated, the spring is compressed and reinforcing element 36 engages a rigid

mounting 40 attached to the distal end 16 of the catheter, which mounting also holds ultrasonic emitter 23. This assures that the axis 26 of the balloon structure is precisely aligned with the axis of the emitter and reinforces the balloon against deflection transverse to the axis 26.

Please replace paragraph 0059 of the present specification with the following amended paragraph:

**[0059]** As discussed in the ~~1271~~<sup>1271</sup> '257 application and in the '512 publication, the common wall 24 separating the balloons forms an active, reflective interface. This active interface desirably has the form of a surface of revolution of a parabolic section around the central axis 26. When the balloons are in their inflated, operative configuration shown in FIG. 1, ultrasonic waves emitted by emitter 23 are directed radially outwardly away from axis 26 and impinge on the parabolic active interface 24, where it is reflected forwardly and slightly outwardly away from axis 26 and focused so that the ultrasonic waves emitted along various paths mutually reinforces within a ring-like ablation region A, just forward of the forward wall 38 of the structural balloon encircling axis 26. The focused ultrasonic waves in this region can effectively ablate myocardial tissue and form a substantial conduction block extending through the heart wall in a relatively short time, typically about a minute or less.

Please replace paragraph 0116 of the present specification with the following amended paragraph:

**[0116]** Other extensible structures are disclosed in co-pending PCT International Application No. PCT/US03/28578 and the corresponding co-pending U.S. Patent Application Serial No. 10/635,170, published as US/2004/0054362-A1, the disclosure of which is incorporated by reference herein, as well as in co-pending U.S. Patent Application Serial No. 10/244,271, filed

~~September 16, 2002~~ the '257 application, the disclosures of which are incorporated by reference herein. The preferred extensible structures in these applications include engagement elements which reinforce the expandable structure and form a rigid structure when the expandable structure is in its expanded condition. In one arrangement, the engagement elements include a tubular distal engagement element which extends proximally from the distal end of the expandable structure or balloon. A coil spring is disposed inside of this tubular engagement element. A proximal engagement element includes a main portion, a stem having a diameter smaller than the diameter of the main portion and a bulbous tip at the proximal end of the stem. The bulbous tip is engaged inside the distal engagement element at all times. When the expandable structure is in its collapsed condition and the extensible structure is in its extended condition, only the bulbous tip remains engaged inside the distal engagement element. In this disengaged condition, the distal engagement element can pivot around the bulbous portion of the stem so that the structure can flex. When the expandable structure is expanded, the distal element is forced proximally, so that the main portion of the proximal element enters into the distal element and the distal element is forced to a coaxial alignment with the proximal element. In this engaged condition, the elements form a rigid reinforcing structure. An extensible tube may extend from the proximal element through the interior of the coil spring, so as to provide a continuous passageway for the purposes discussed above herein. In a variant of this structure according to a feature of the present invention, the engagement elements may be provided with interlocking features such as an inwardly-projecting flange on the distal engagement element having a diameter slightly smaller than the diameter of the bulbous tip. Such a flange prevents the distal engagement element from moving distally beyond the bulbous tip on the

proximal engagement element, and thus serves the same function as the interlocking flanges 1397 and 1401 discussed above with reference to FIG. 22A.